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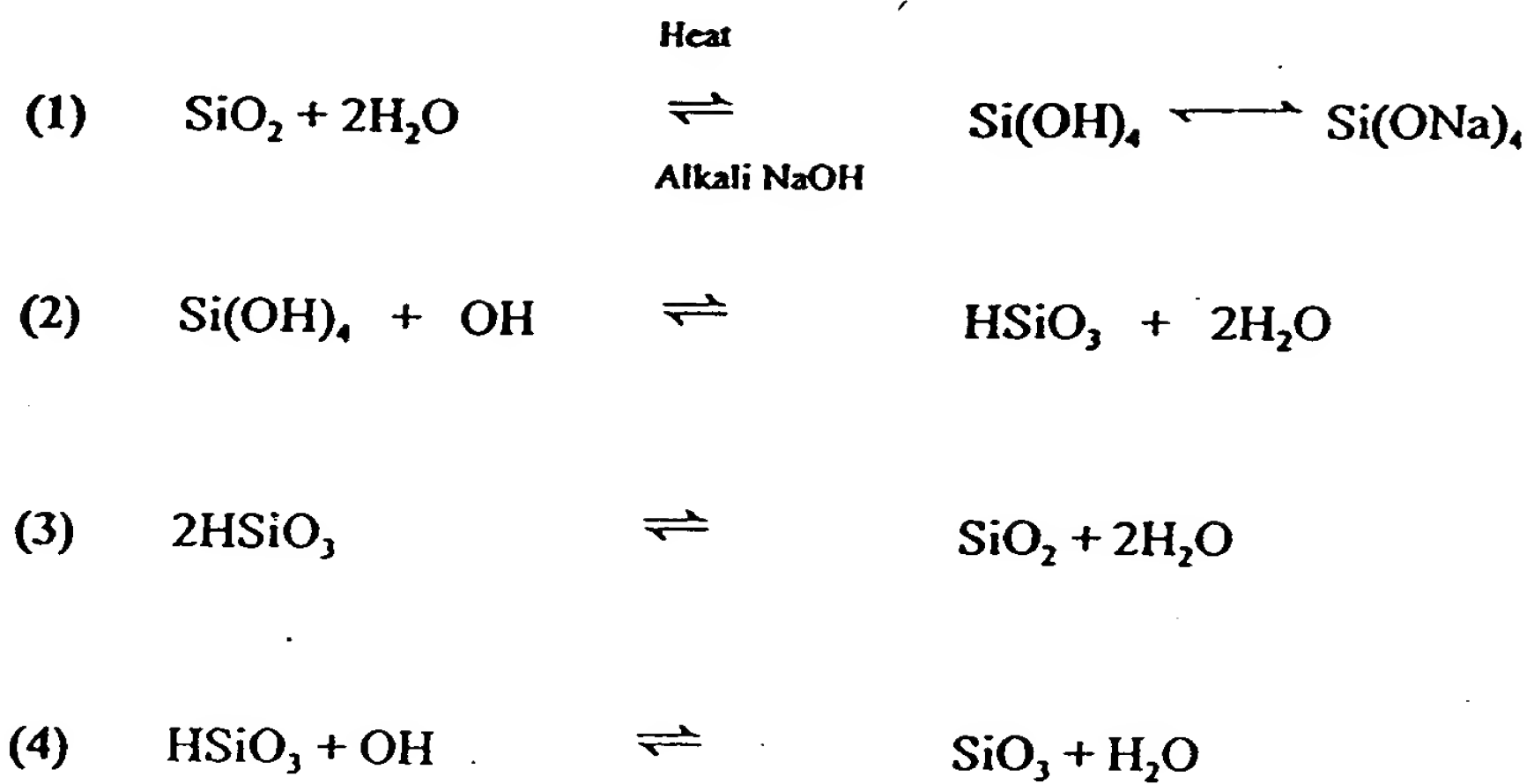


Fig. 1

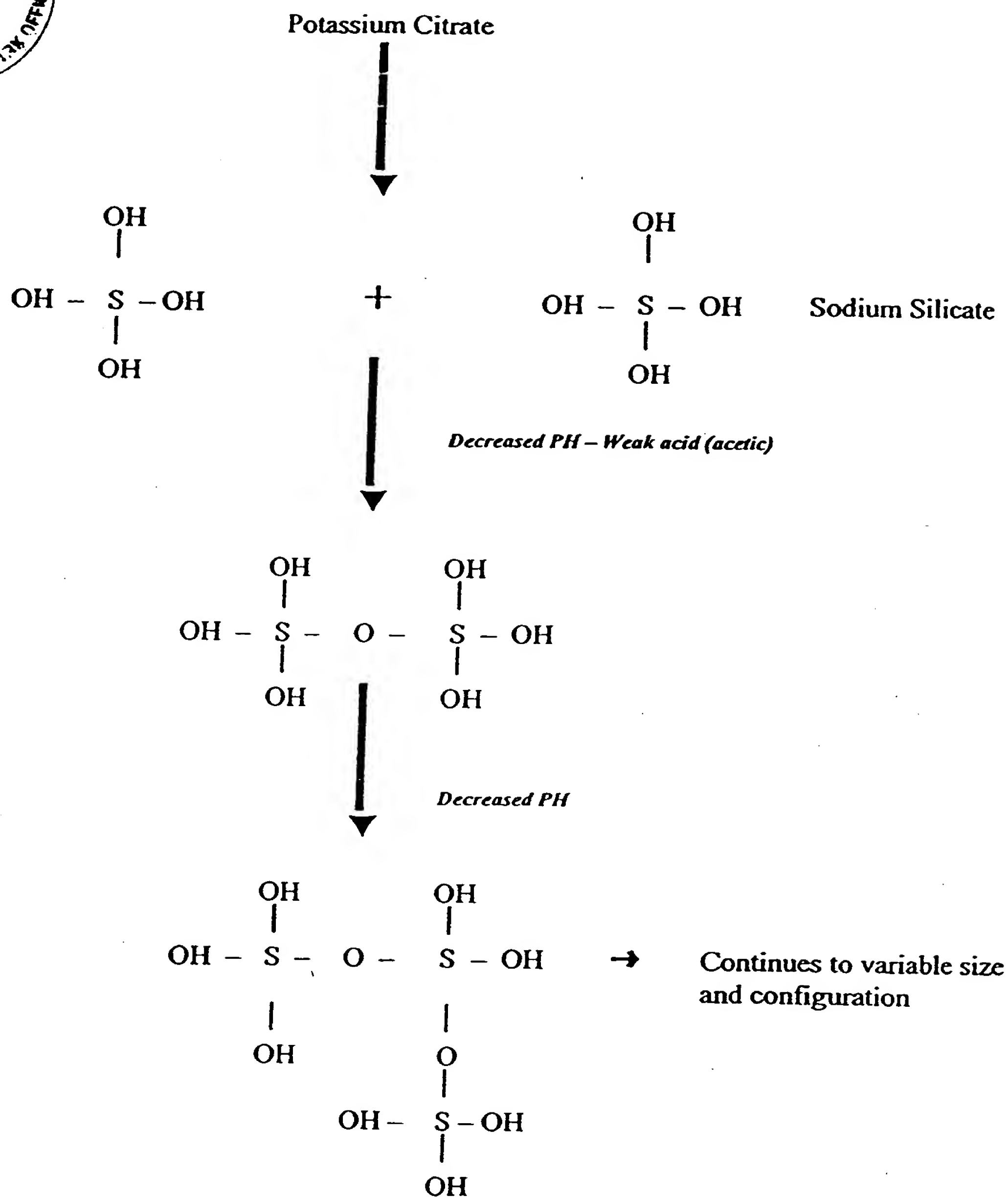


Fig. 2

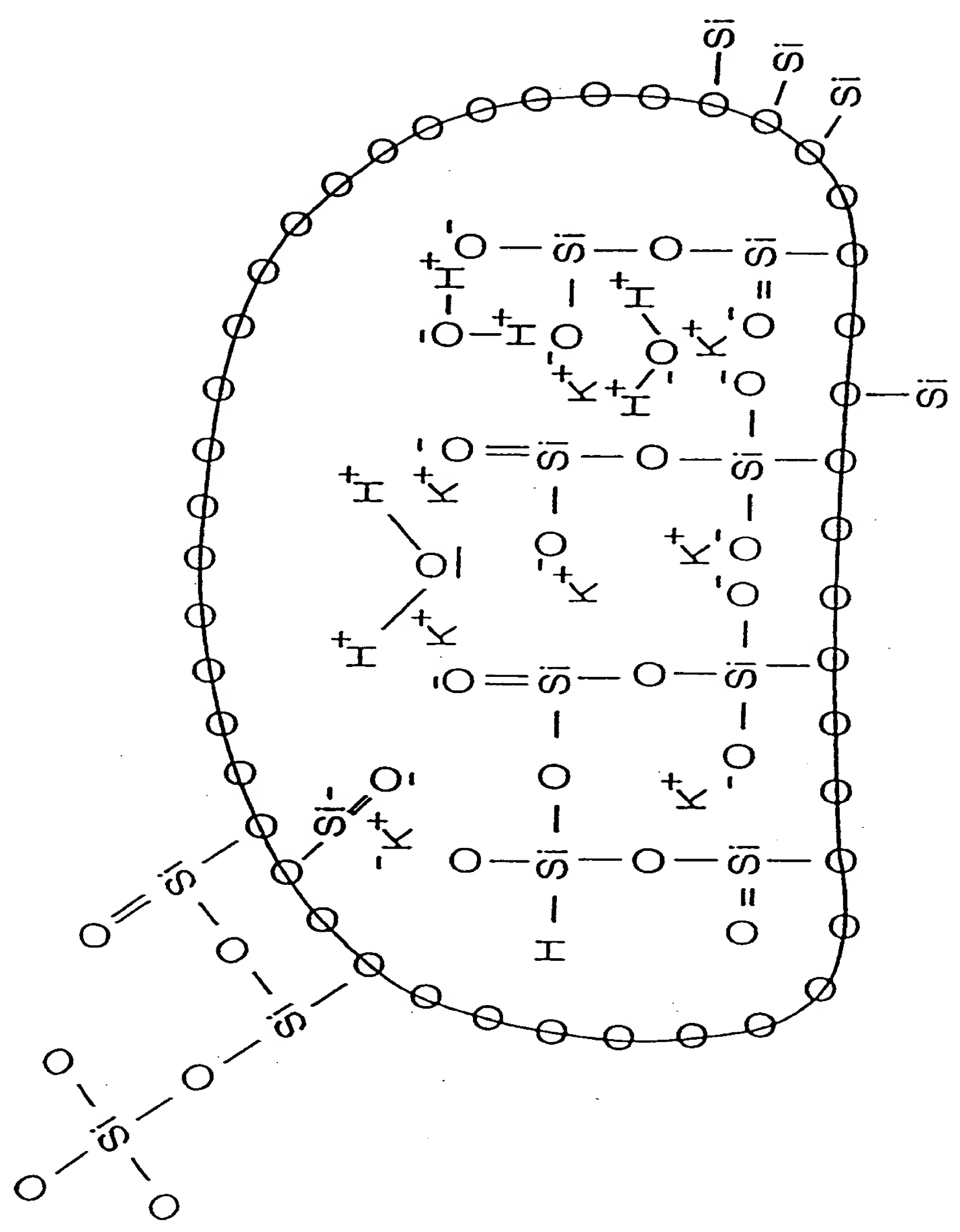


FIG. 3

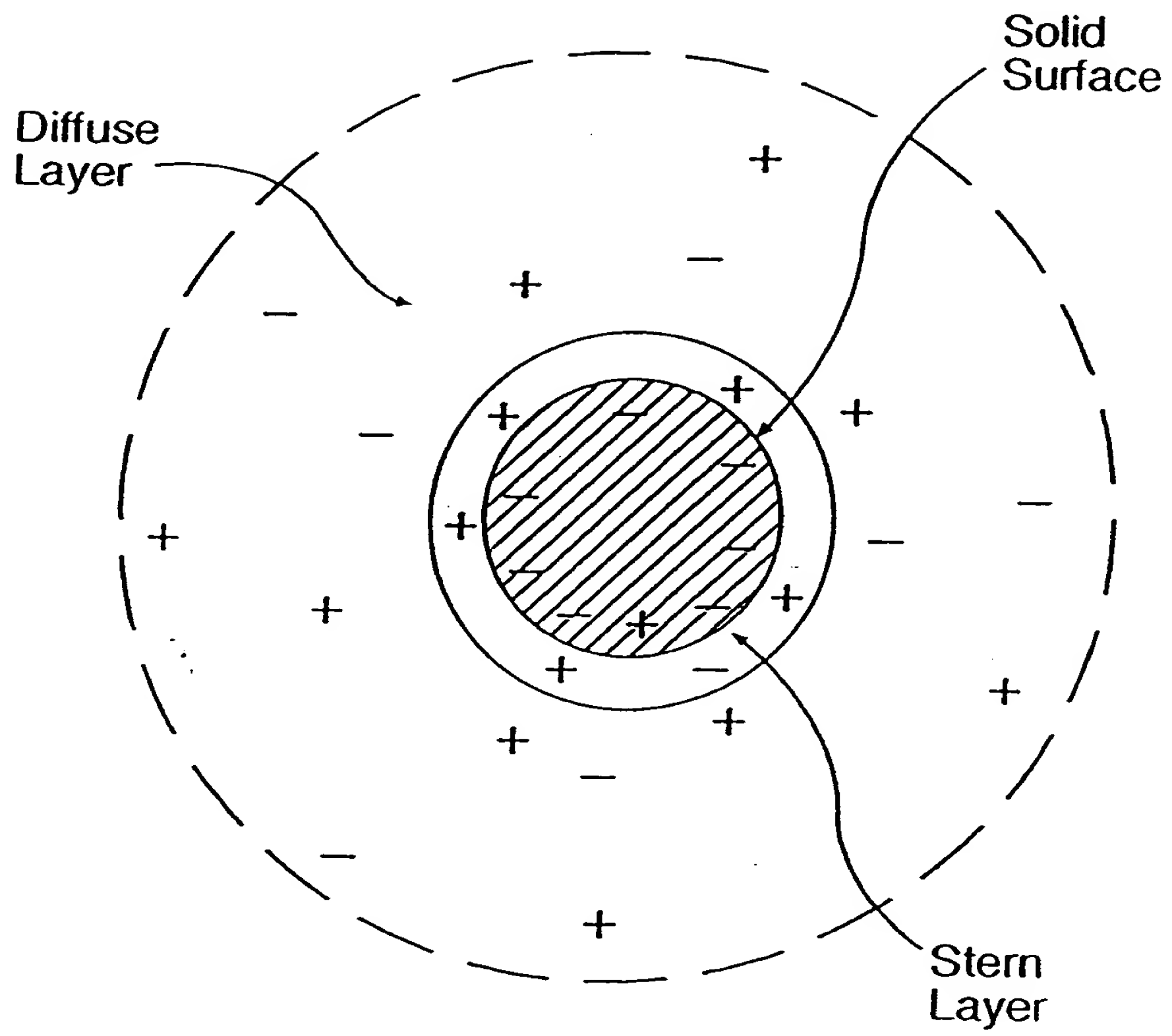


FIG. 4

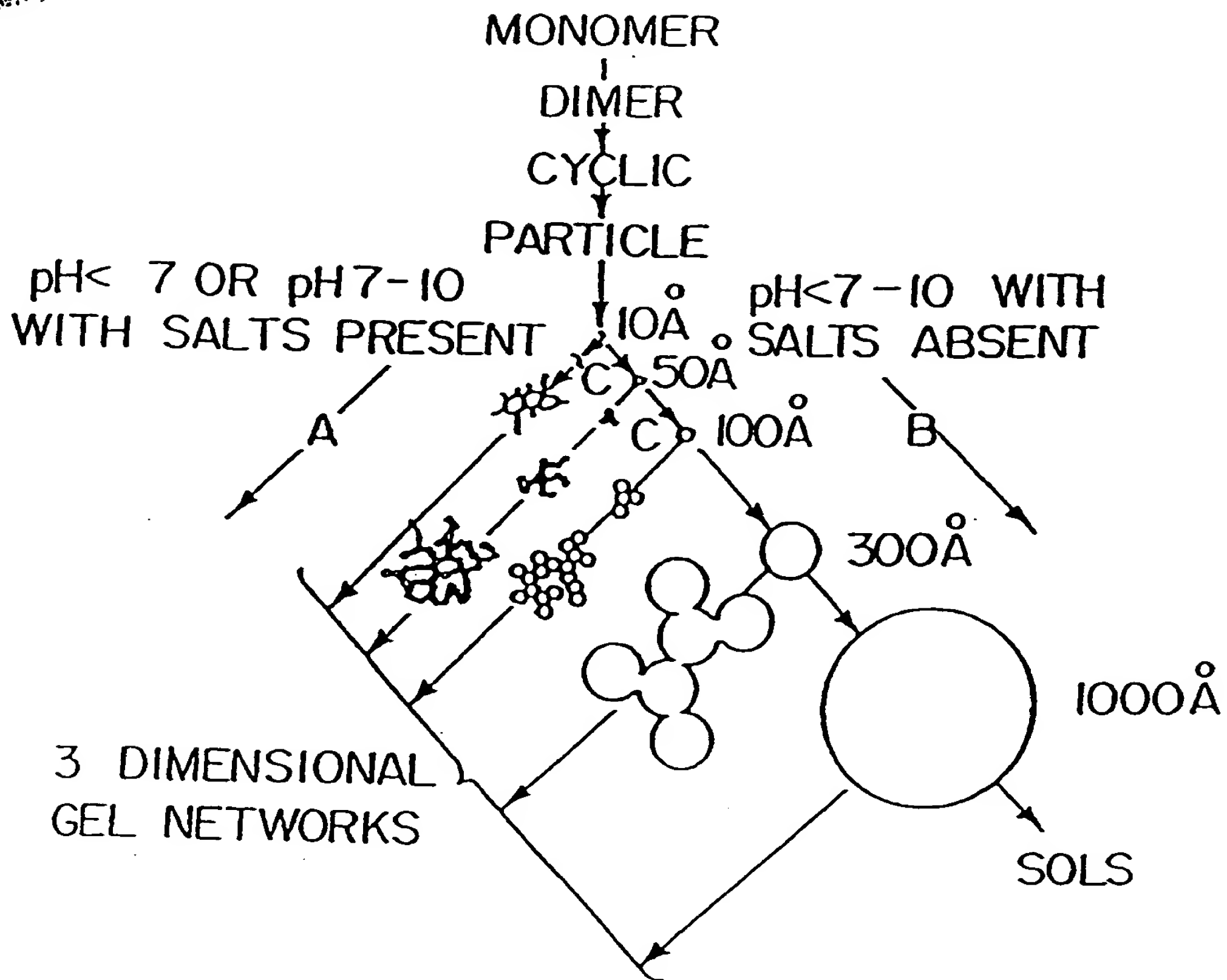
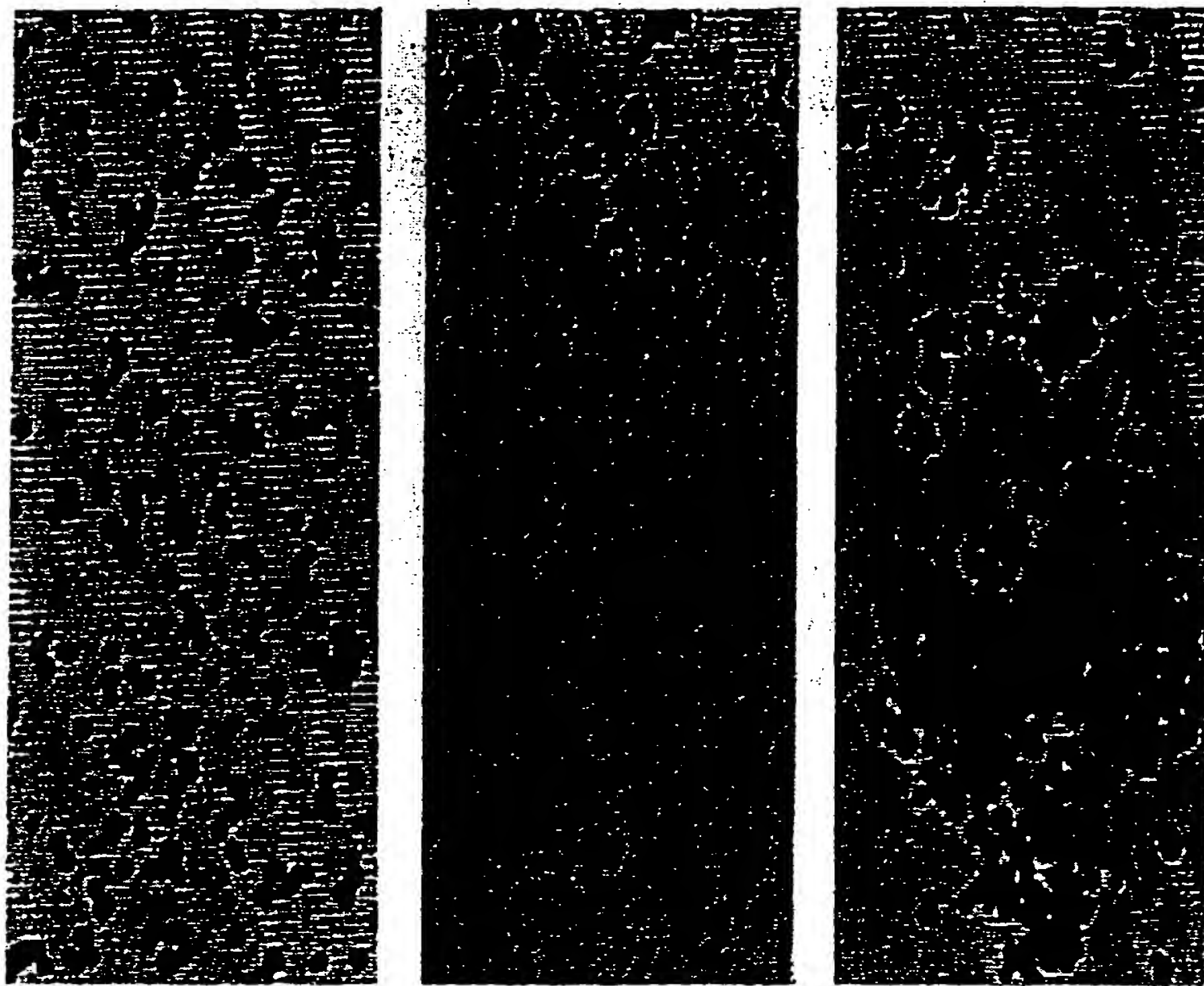


FIG. 5



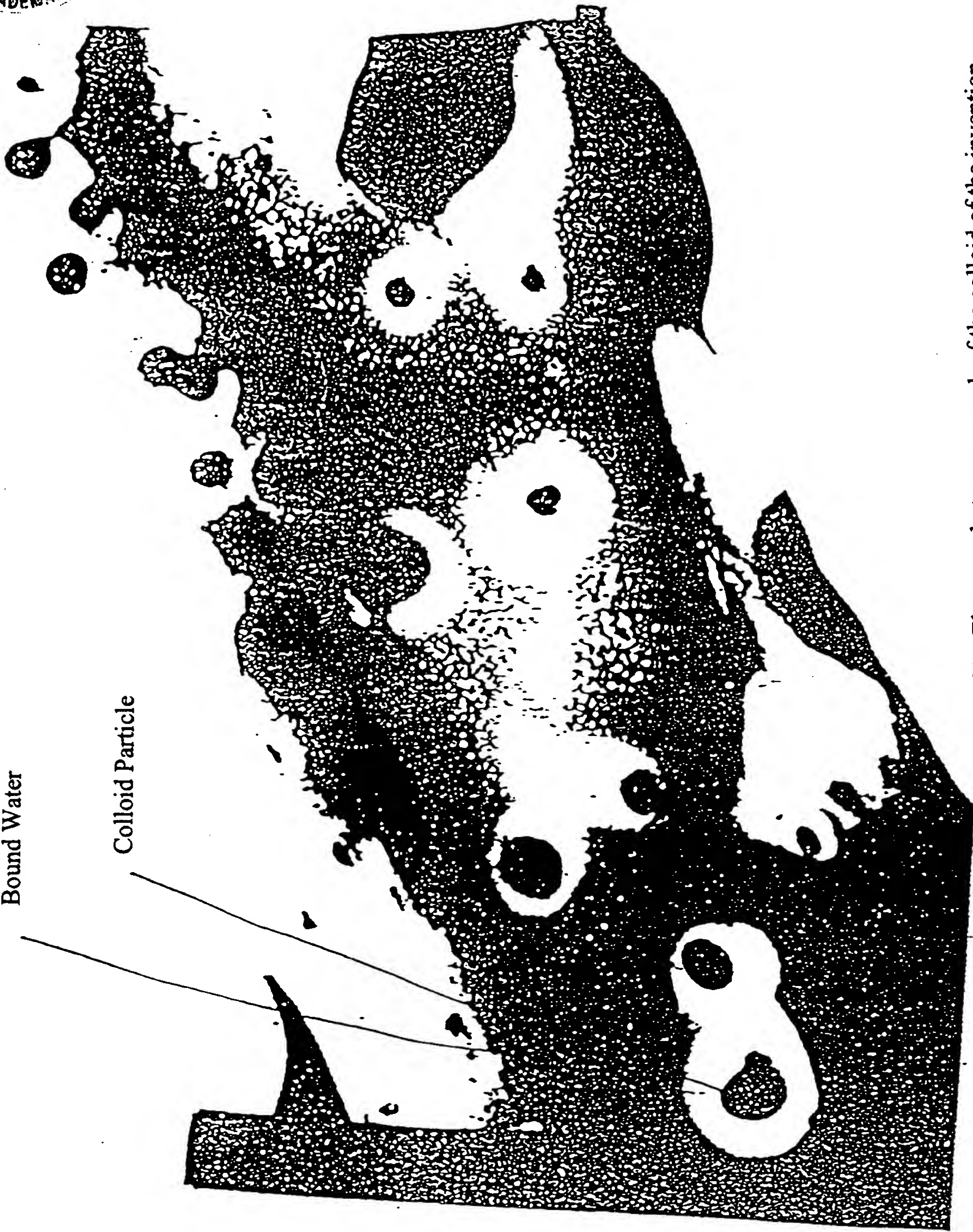
Electron micrographs showing stages of aggregation of 35 milli-micron silica particles: *left*, colloidal aggregates; *center*, aggregates approaching colloidal size; *right*, supercolloidal aggregates or precipitate.

**FIG. 6**



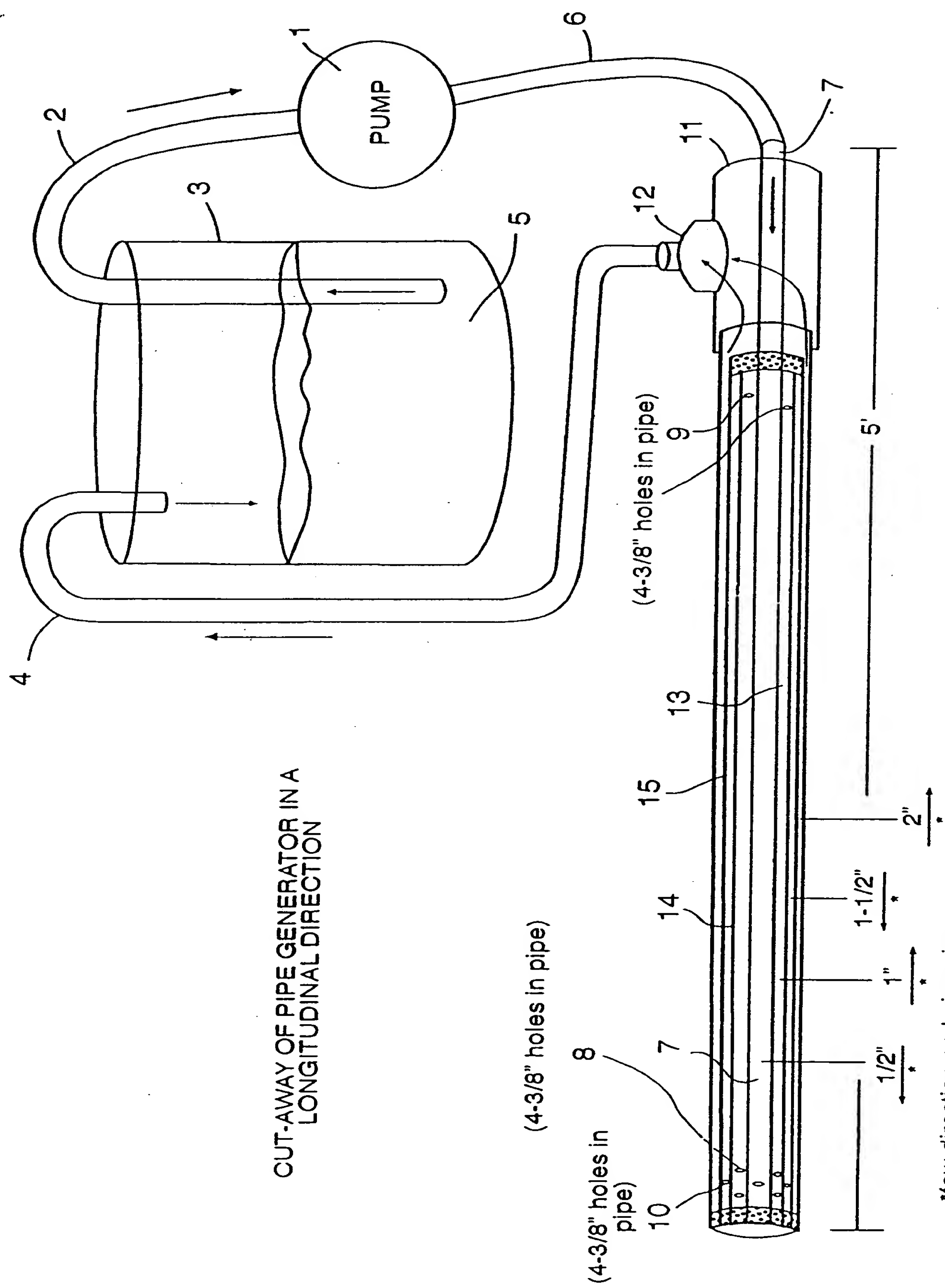
Bound Water

Colloid Particle



6A. Electron photomicro graph of the colloid of the invention.





CUT-AWAY OF PIPE GENERATOR IN A  
 LONGITUDINAL DIRECTION

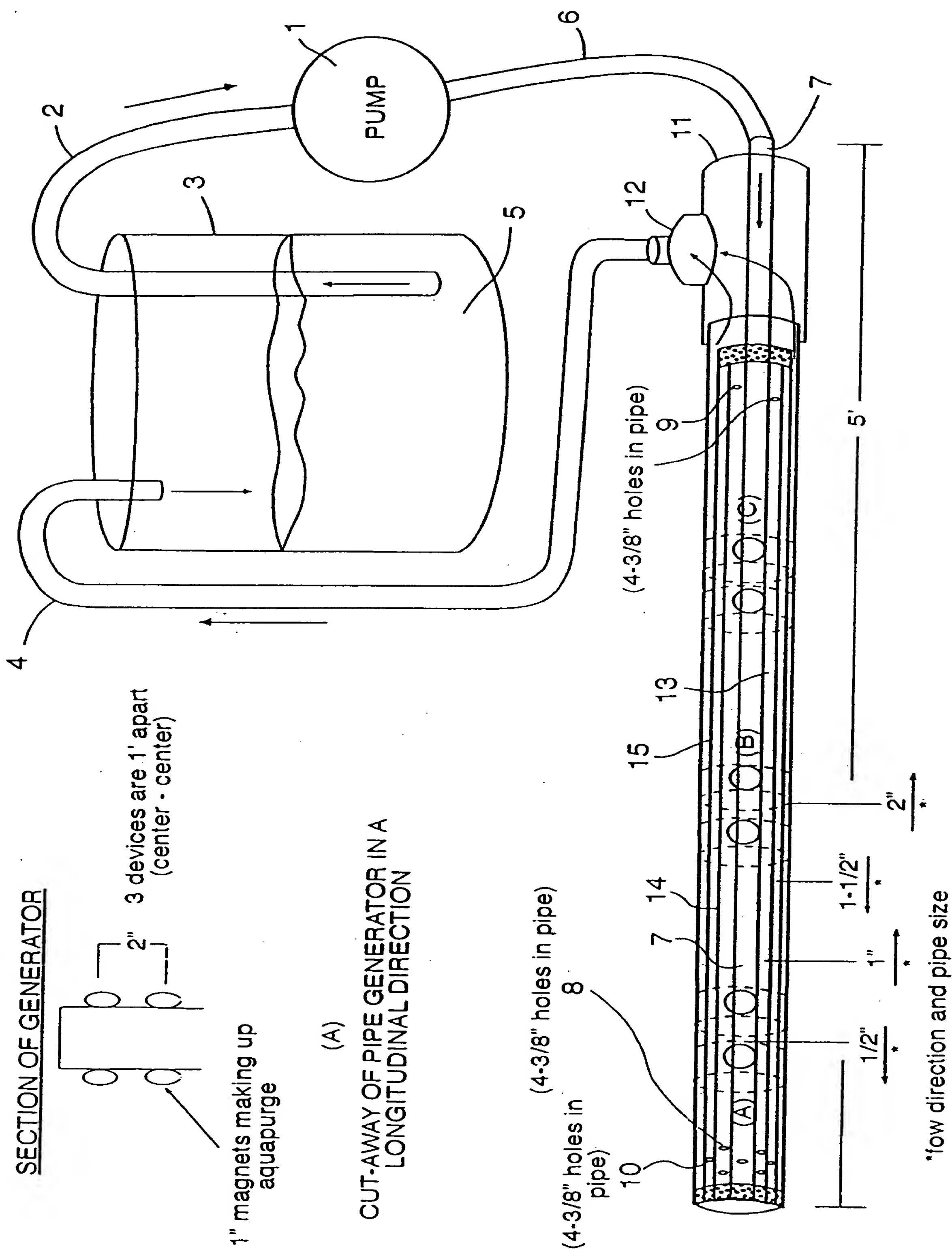
(4-3/8" holes in pipe)

(4-3/8" holes in  
 pipe)

(4-3/8" holes in pipe)

\*low direction and pipe size

FIG. 7





Cross sectional view of counter current generator of the invention with lines A-A' and B-B' noted for measurement purposes.

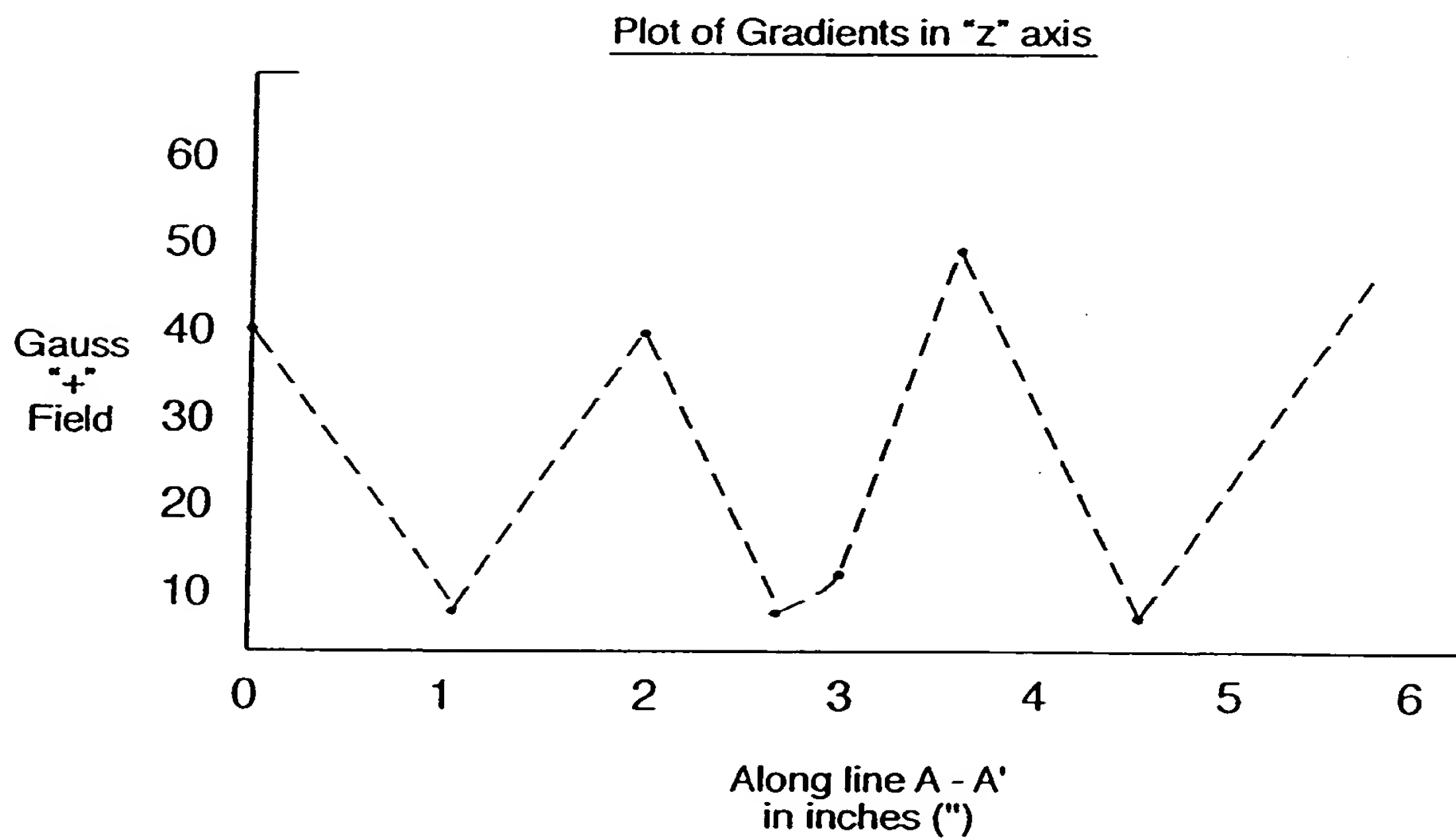
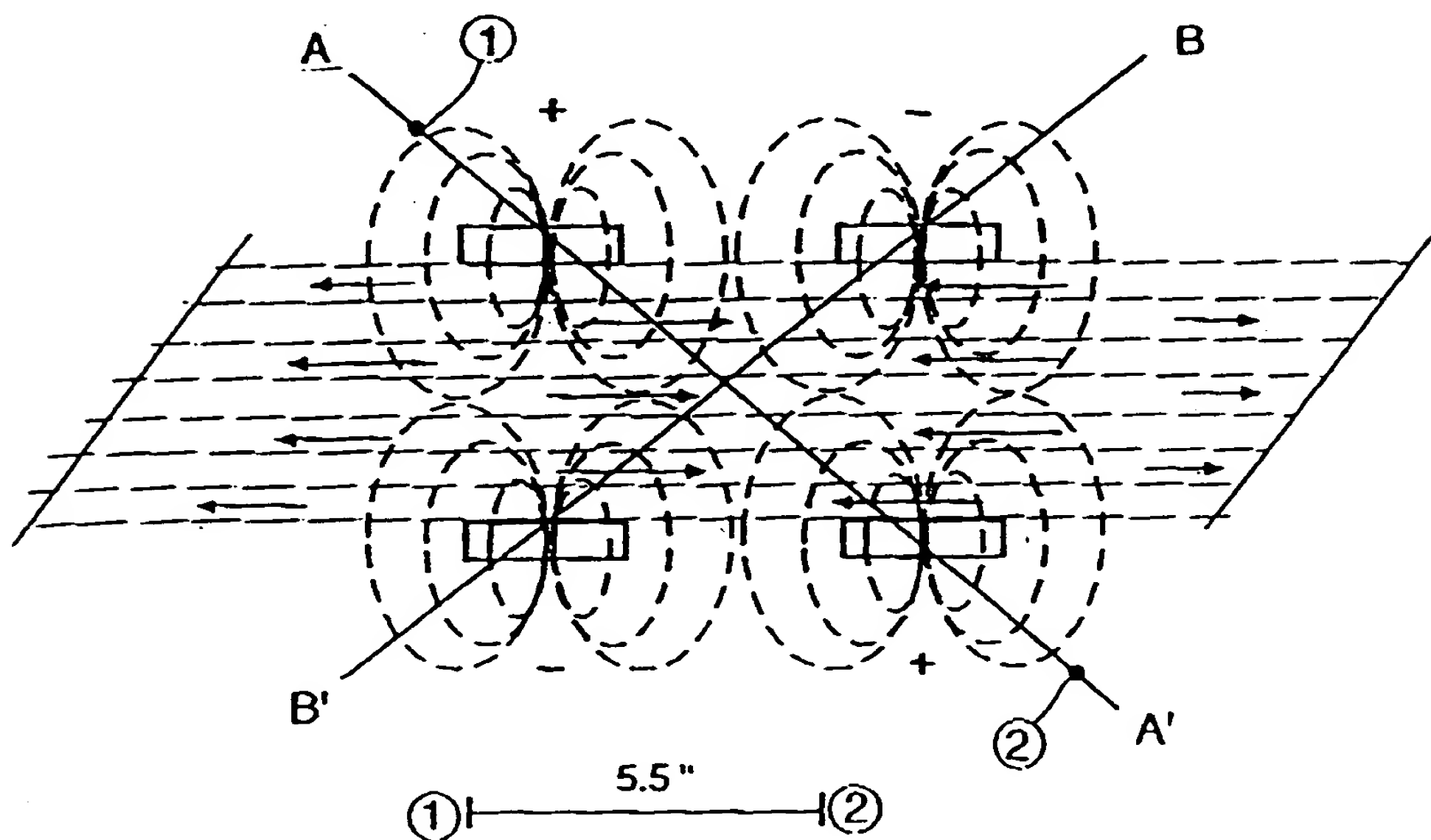


FIG. 9

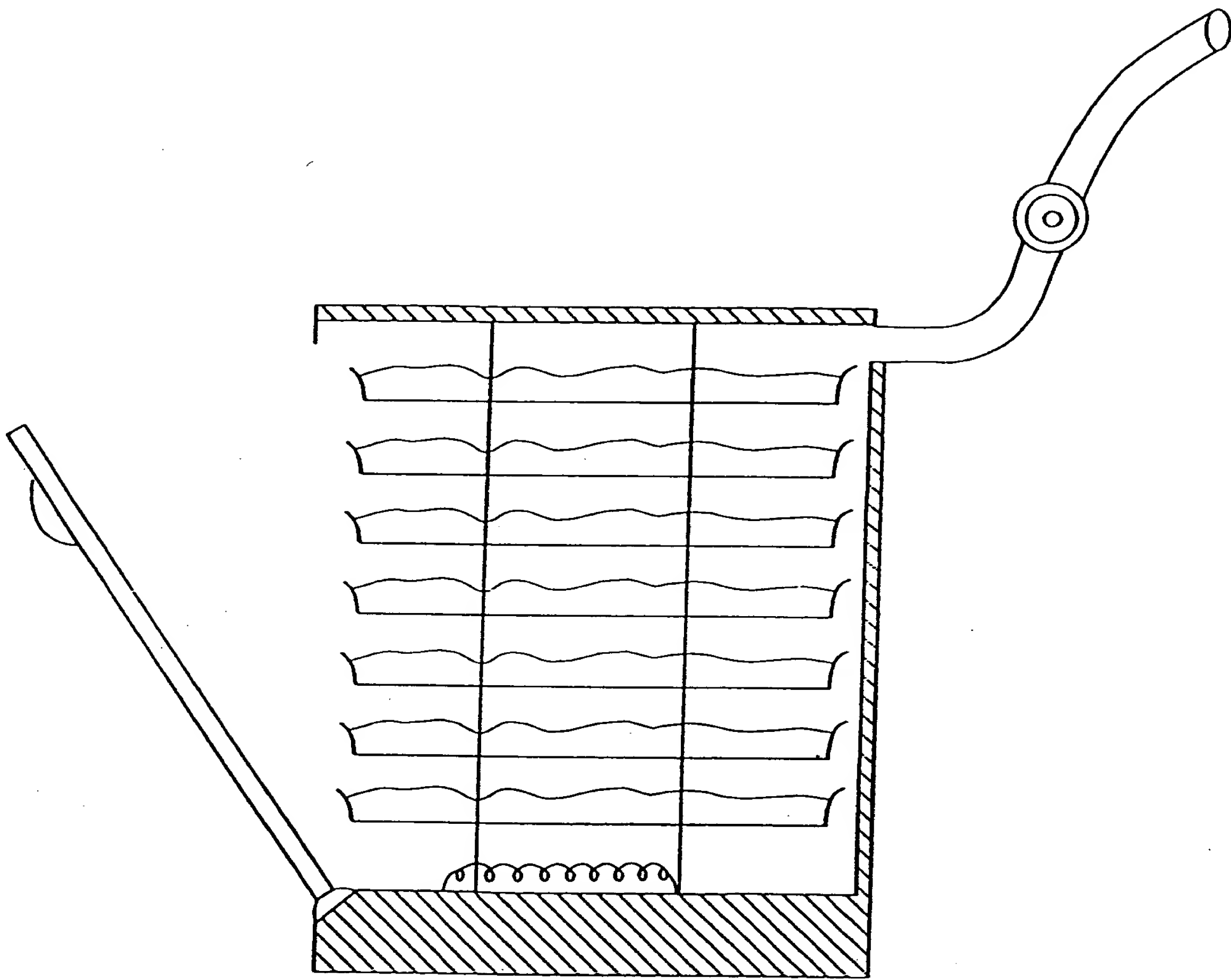
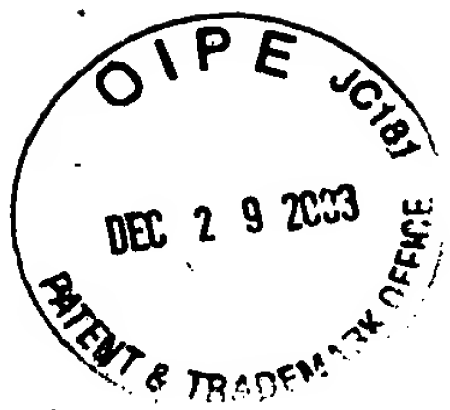


FIG. 10

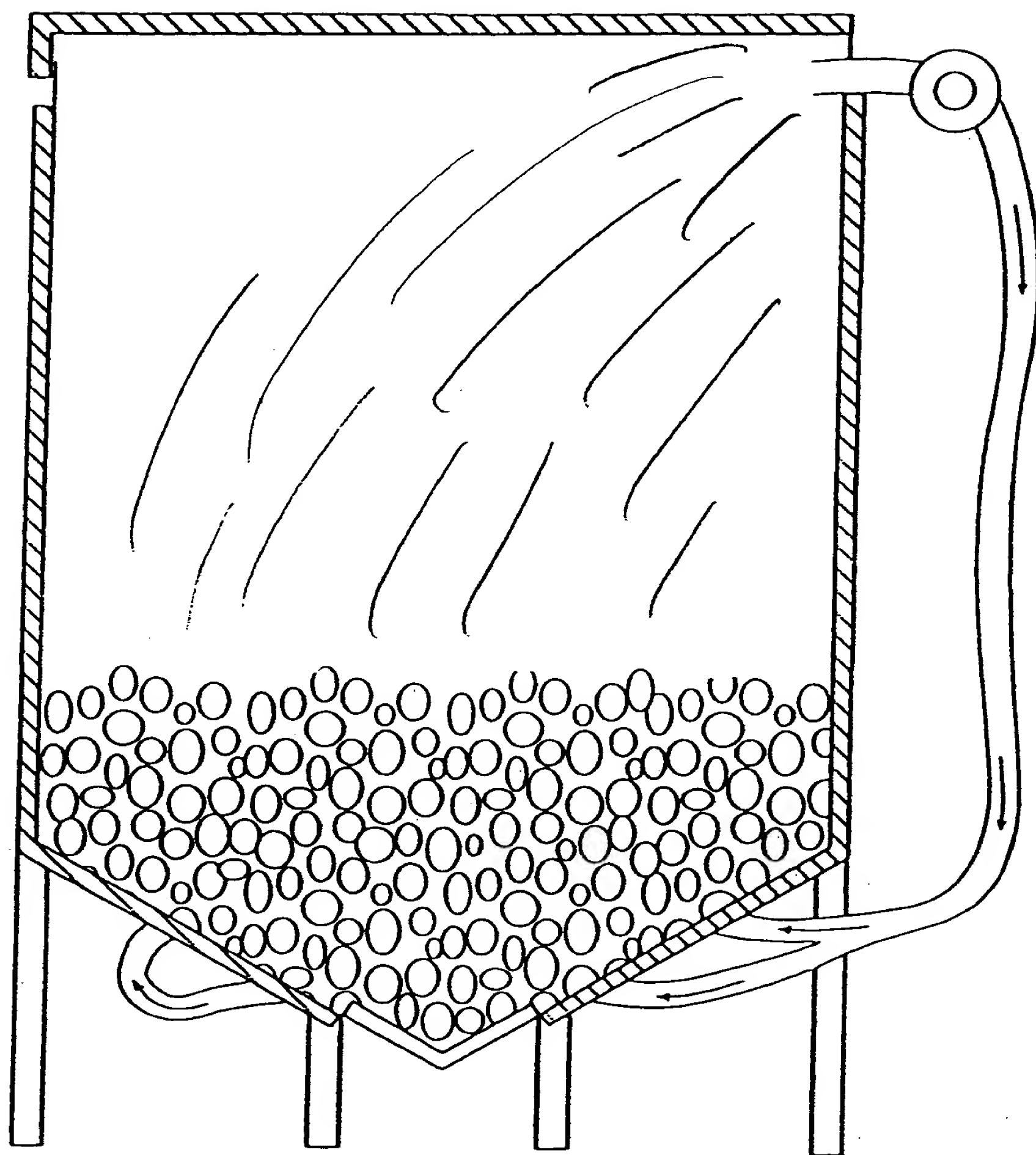


FIG. 11

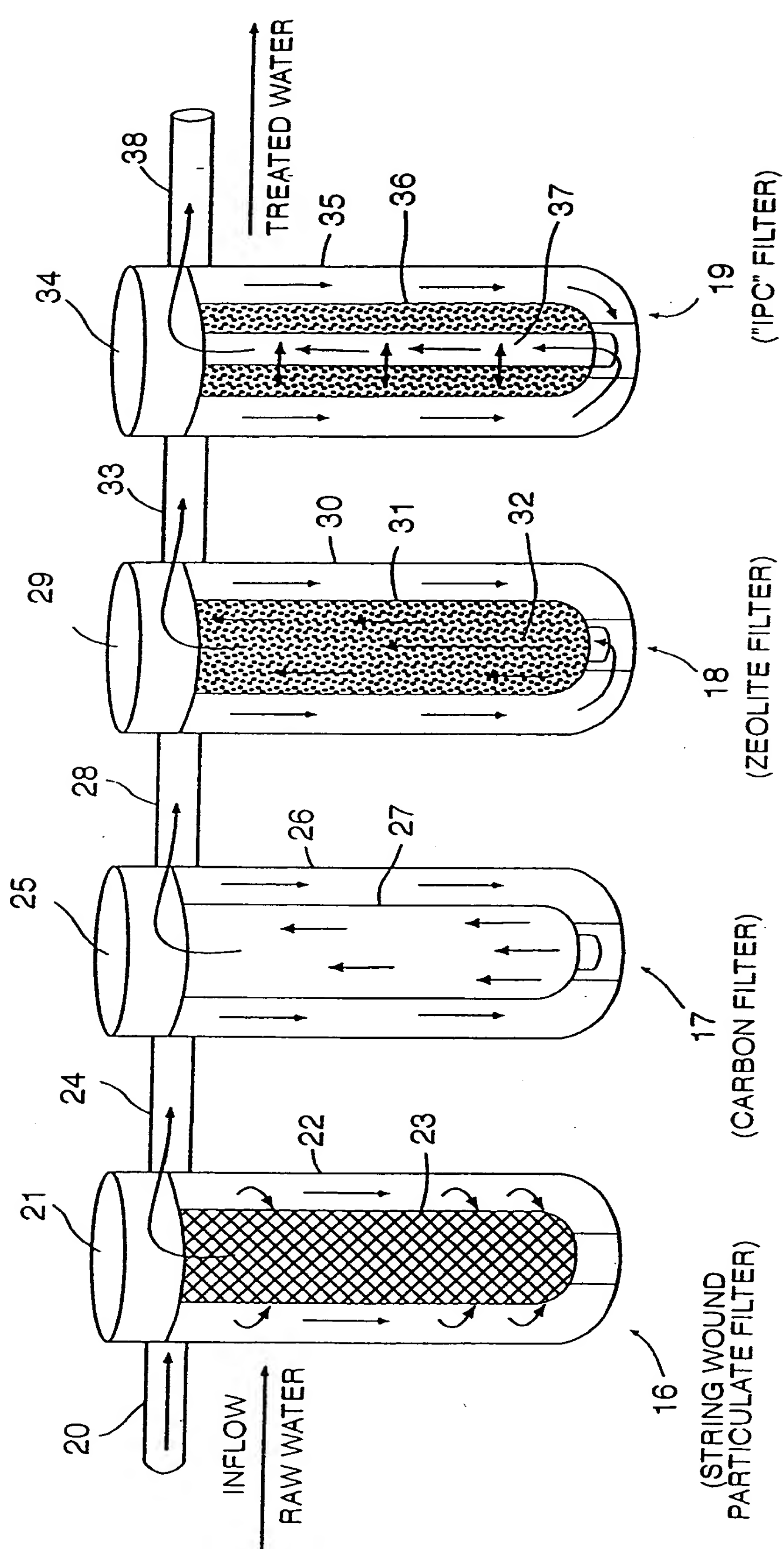


FIG. 12

# HOME WATER SOFTENER, WITH AUTOMATIC CONTROLLER FOR REGENERATION AND SERVICE

## IPC CONVERSION

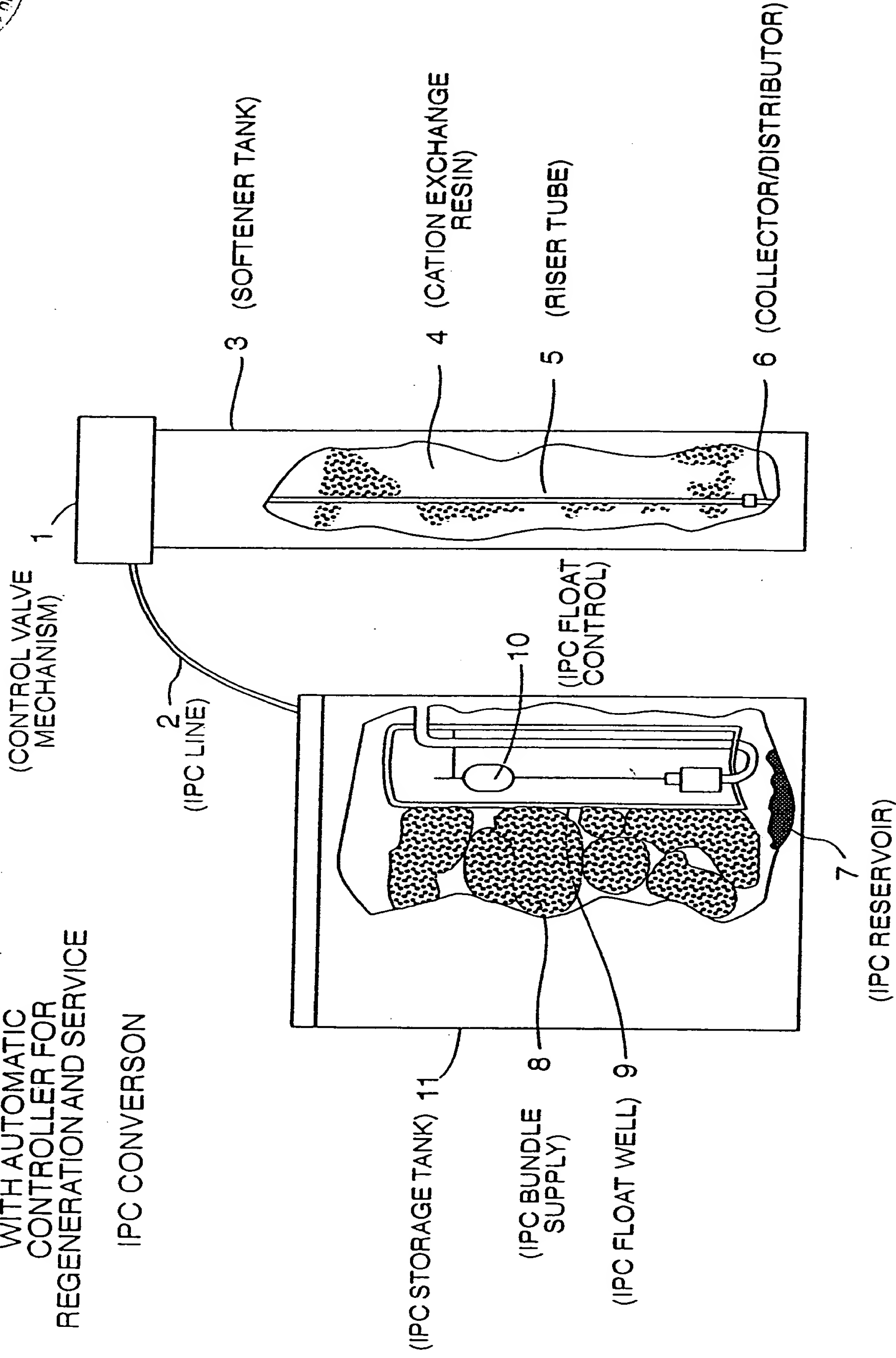


FIG. 14

CROSS SECTIONS  
(REGENERATION TANK)

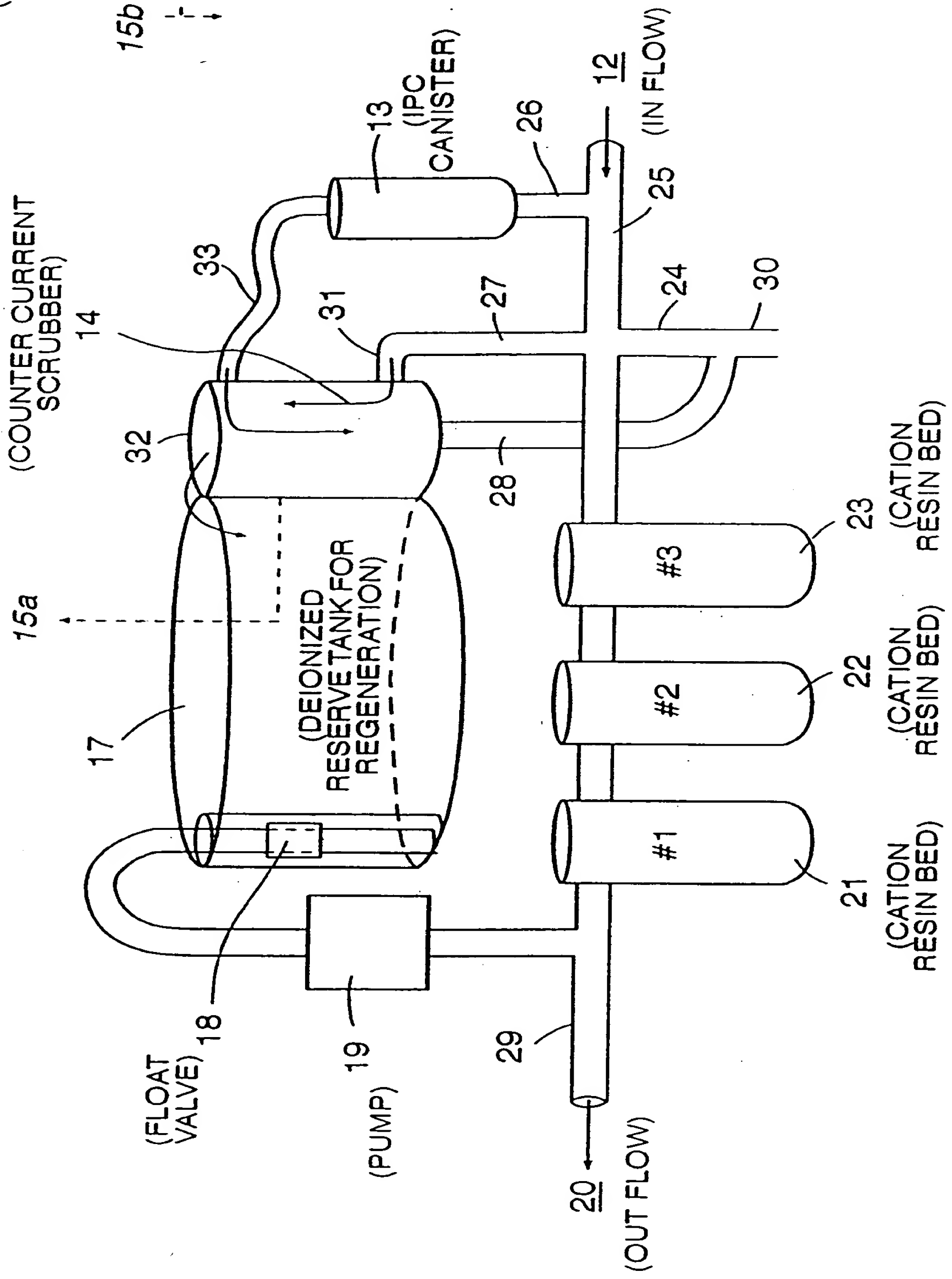
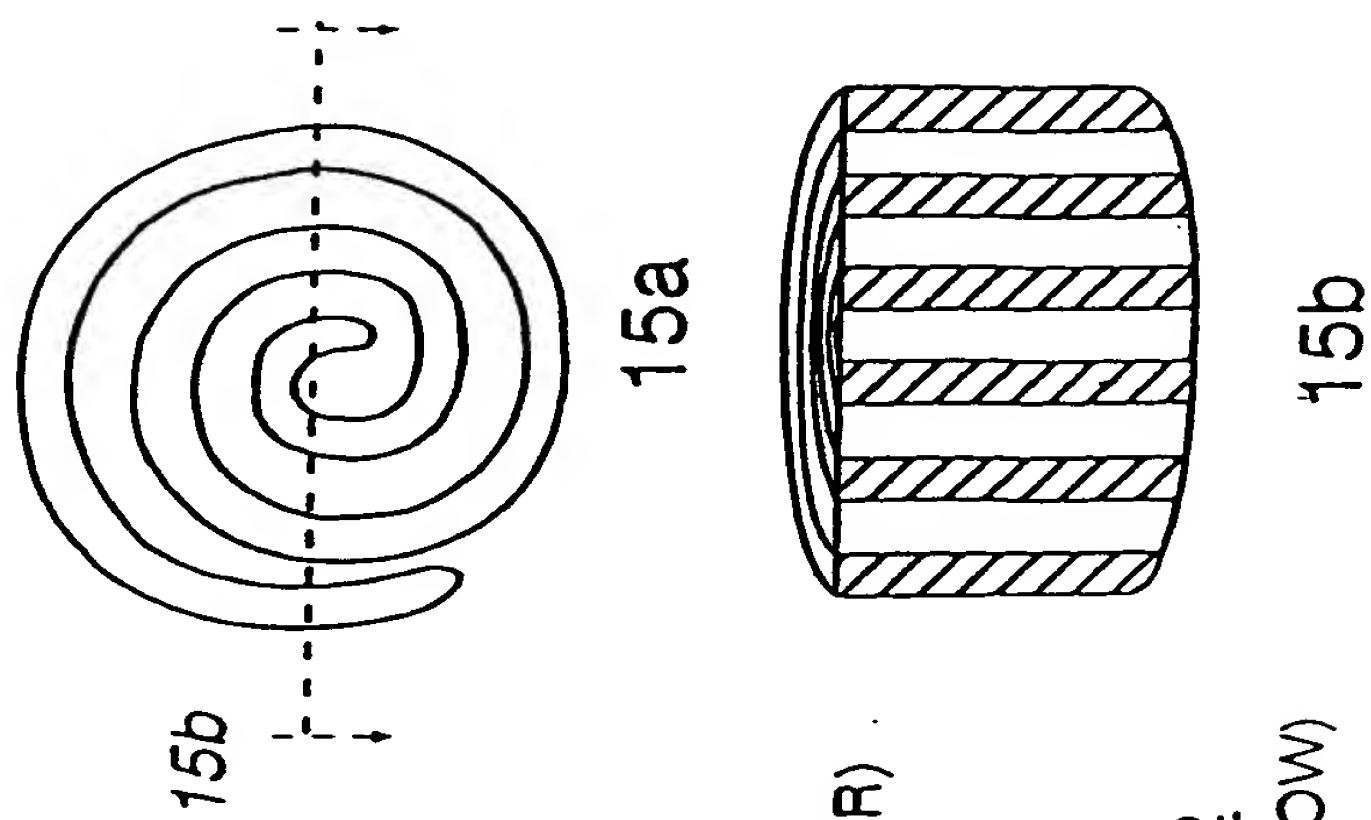


FIG. 15



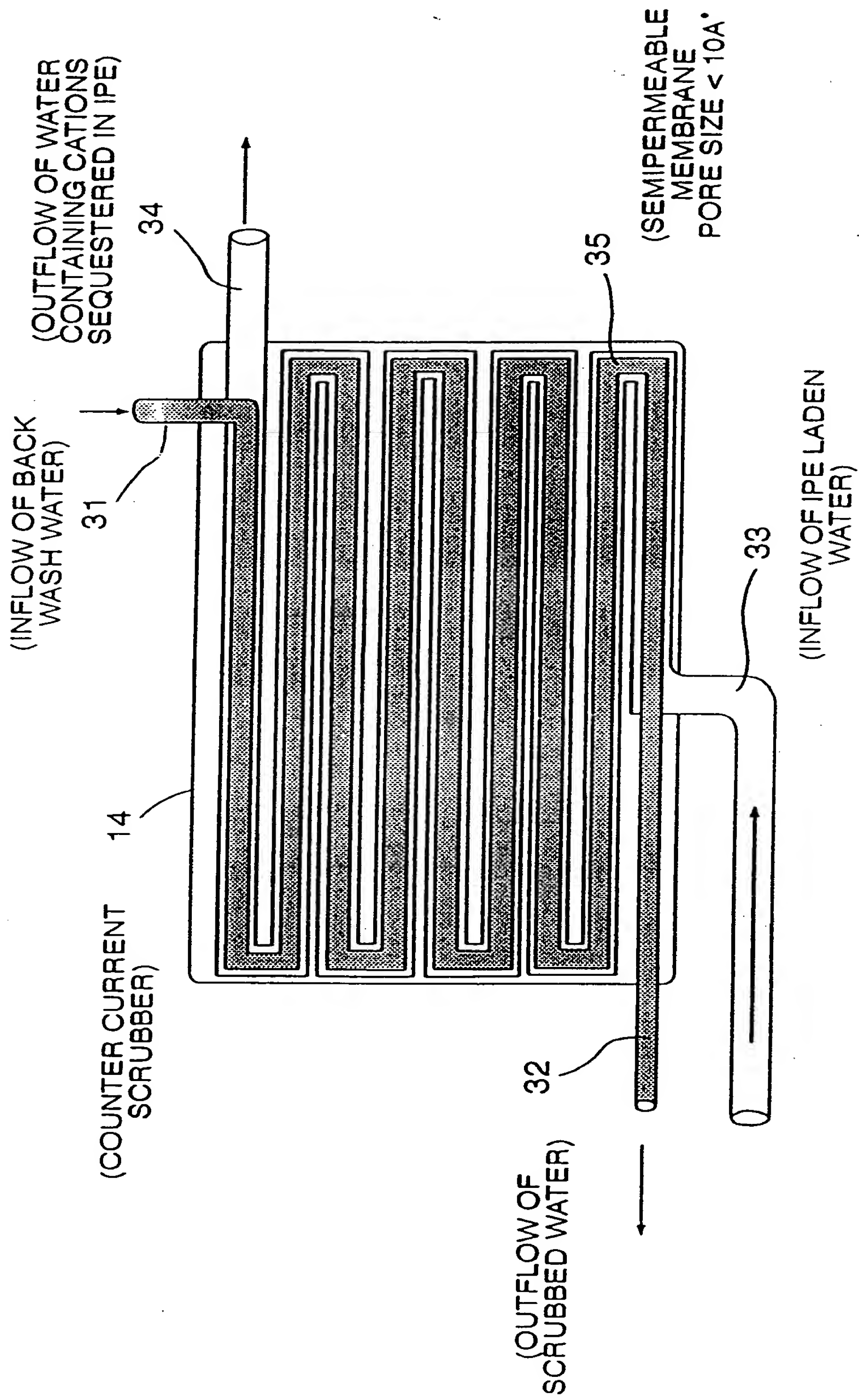


FIG. 16



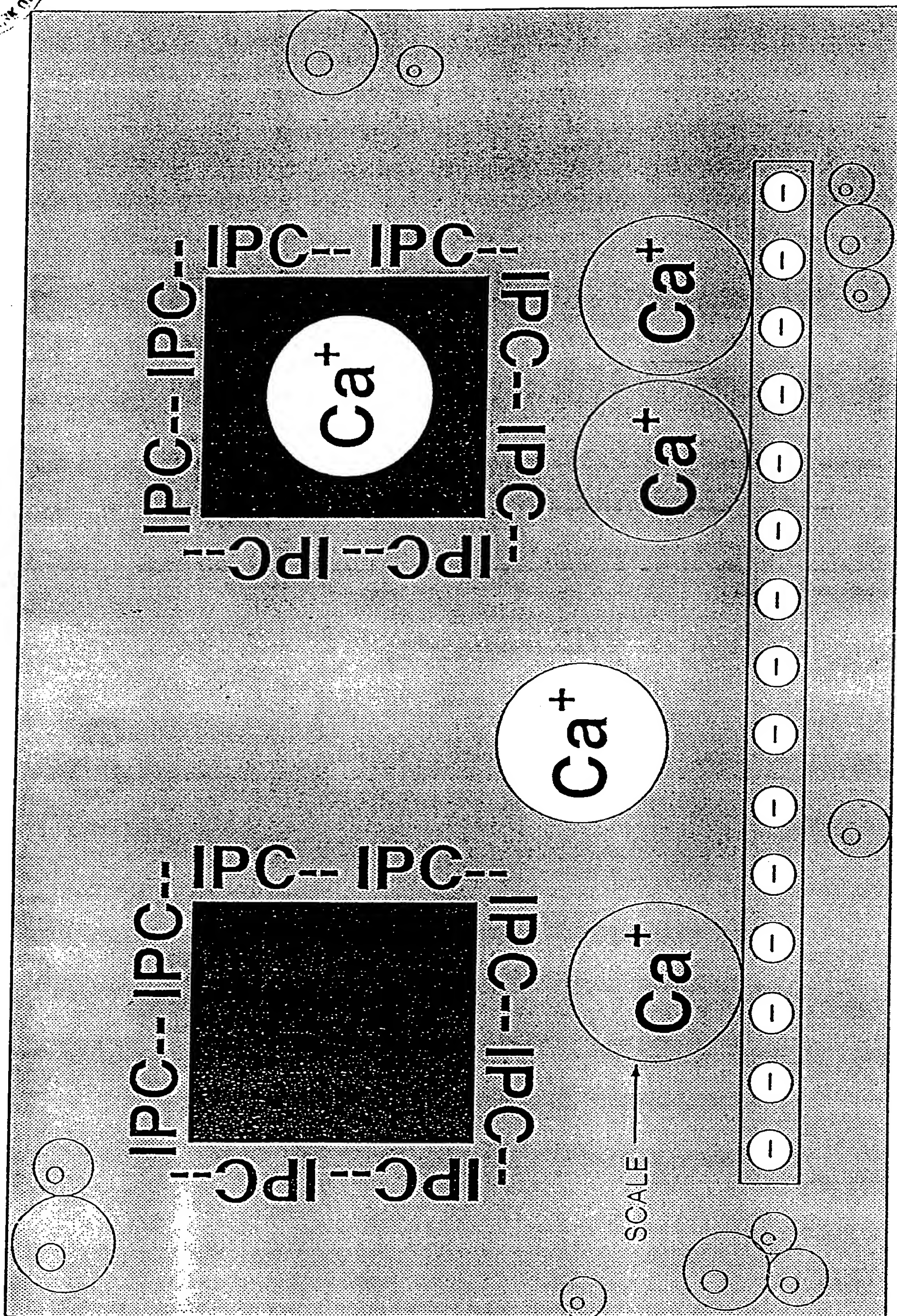


FIG. 17

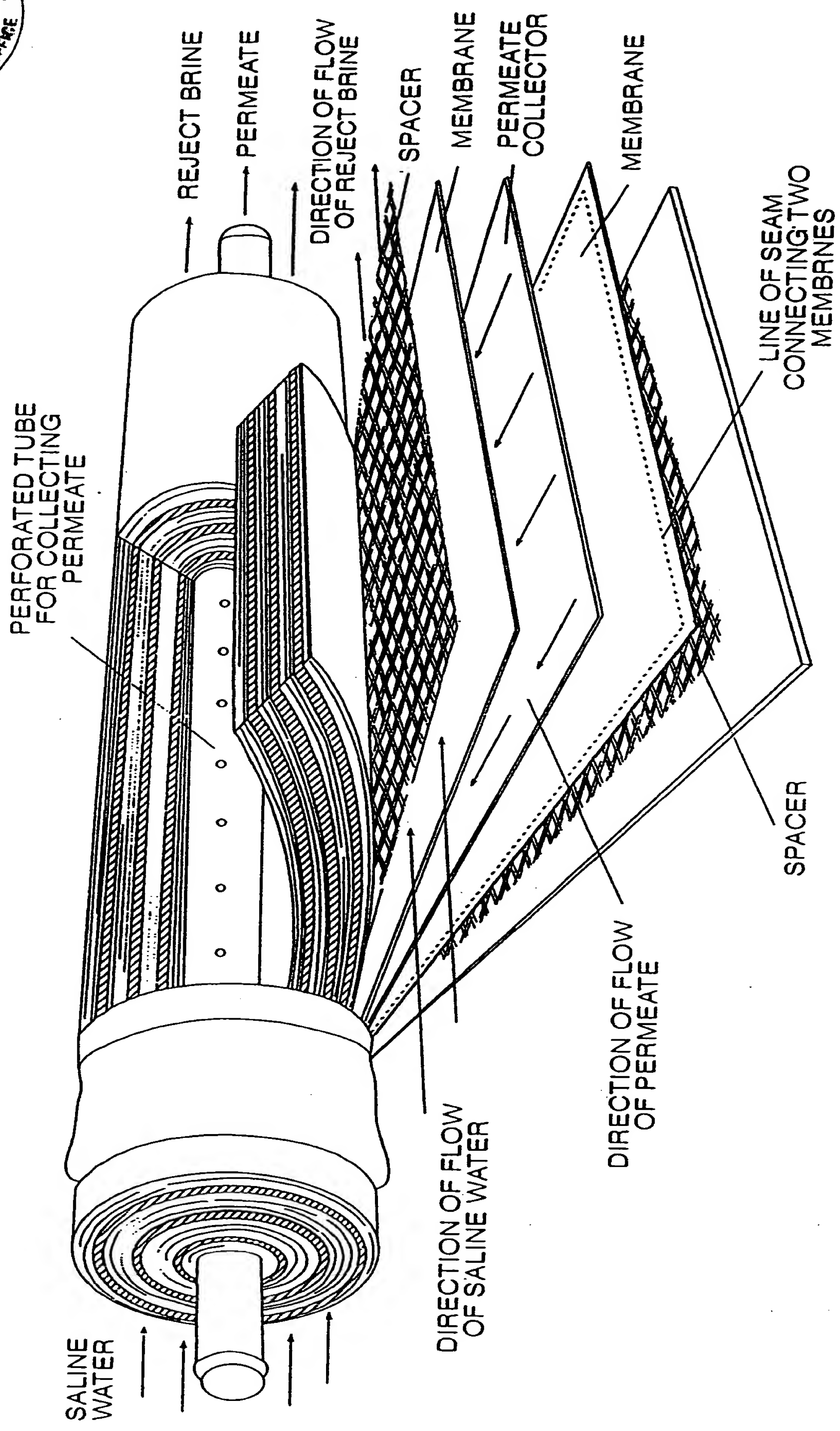


FIG. 18



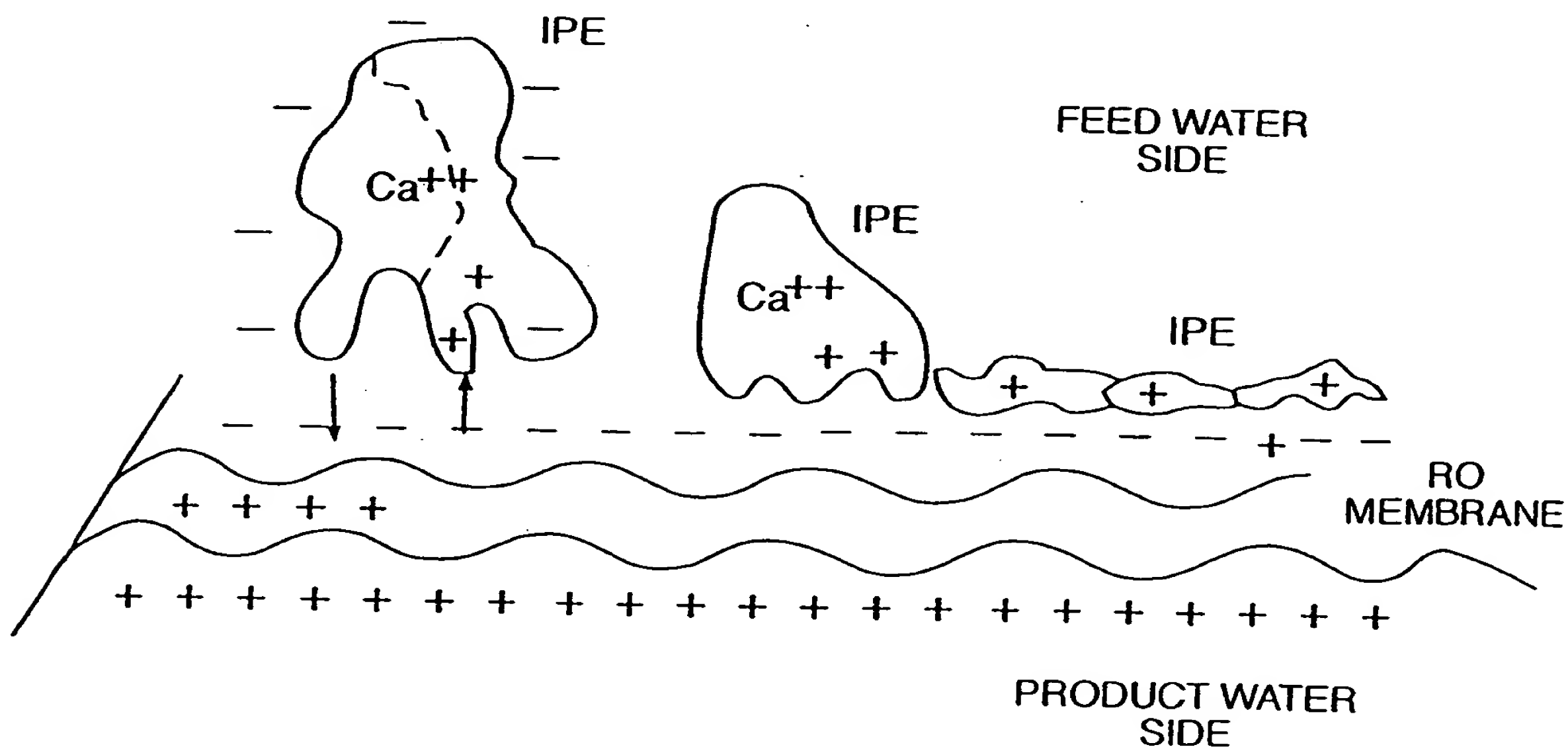
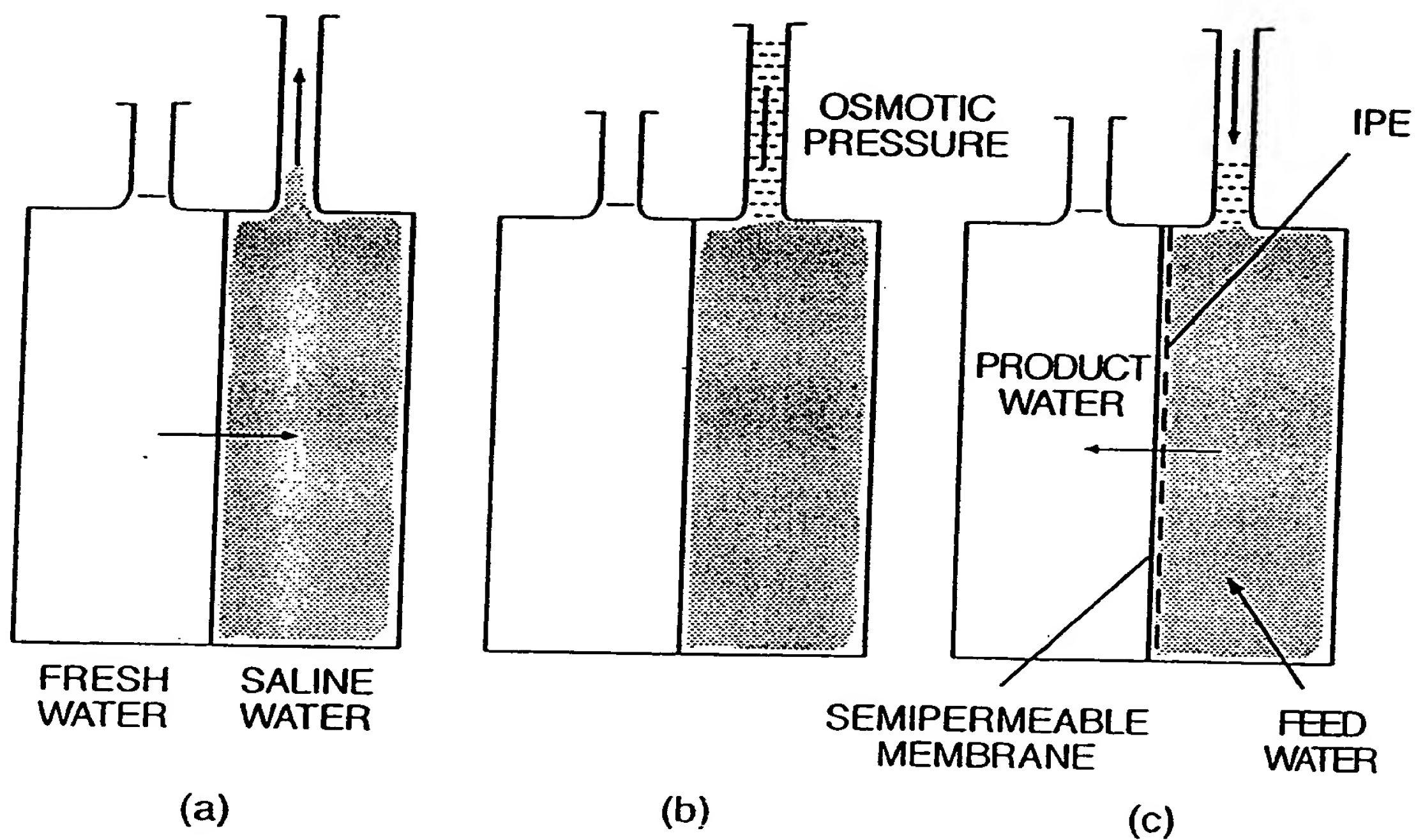


FIG. 19

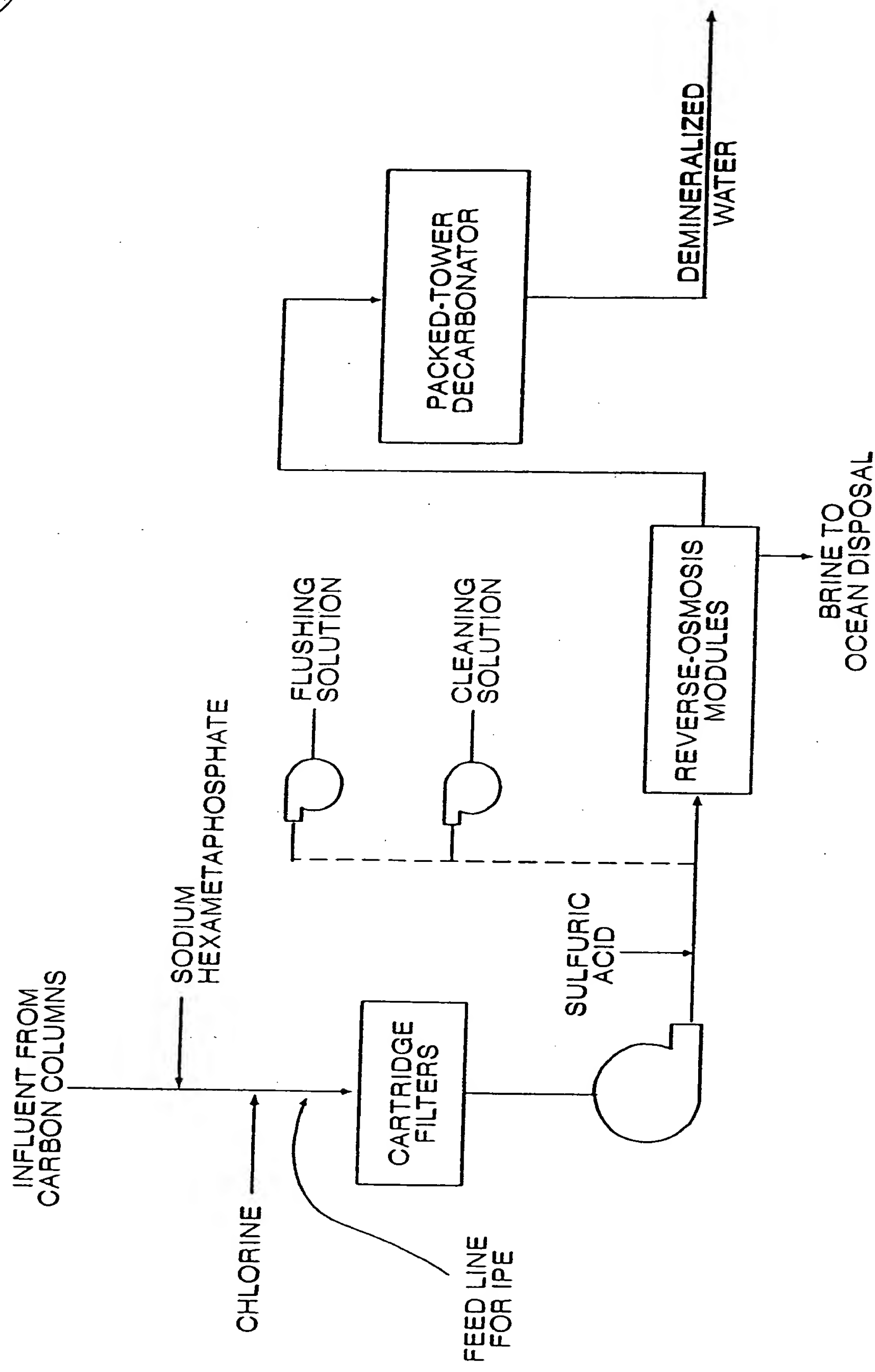
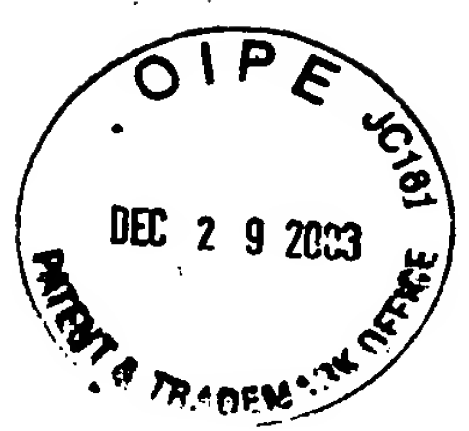


FIG. 20